IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

IN RE APPLICATION OF :

TOKUGEN YASUDA ET AL. : GROUP ART UNIT: 1712

SERIAL NO. 10/089,163 :

FILED: 03/27/2002 : EXAMINER: MOORE, MARGARET G

FOR: OCULAR LENS MATERIAL

DECLARATION UNDER 37 C.F.R. 1.132

HONABLE COMMISSIONER OF PATENTS AND TRADEMARKS

WASHINGTON, D.C. 20231

SIR:

Now comes Takumi Fujitani who deposes and states that:

1. I am a co-inventor of the invention claimed in the above-identified application.

2. I graduated from the department of engineering, Osaka University in March 1993, and I have been a research scientist since December 1994 in Kuraray Co., Ltd., working on medical materials.

3. I have studied the Official Action of June 18, 2003.

4. I conducted under my supervision and direction the following experiments in order to make the present invention clear.

5. In this experiment, the following method was used for the determination of ultimate strain.

Ultimate Strain

A cubic test sample of which one edge is 5.0 mm long is cut off of the ocular lens material (copolymer) obtained in the following Comparative Example. Using a tester (Mac Science's TMA-4000), this is tested for compression with gradually increasing the load applied thereto. The maximum load to it is 500 g, and the load area is 0.785 mm^2 (this is a circle having a diameter of 1 mm). When the sample tested has broken in the test, its deformation [that is, the deformed depth of the sample (unit: mm)] is measured, and the ultimate strain (%) of the sample is obtained according to the numerical formula mentioned below. When the sample is not broken in the test, its deformation is measured at the point at which the

maximum load is applied thereto (that is, at the point at which a load of 500 g is applied to the sample) is measured, and the ultimate strain of the sample is obtained according to the following numerical formula.

The samples (for ocular lenses) having a larger ultimate strain in the test method are less brittle and have better durability.

Ultimate Strain (%) = $(h/H) \times 100$

in which h indicates the deformation (mm) of the test sample at break or under maximum load; and H indicates the height (mm) of the test sample under no load.

Comparative Example

30 parts of tris(trimethylsiloxy)silylpropyl methacrylate (A1), 10 parts of 3,5-bis(3-methacroyloxy-propyl)-3,5-bis(trimethylsiloxy)-1,1,1,7,7,7-hexamethyltetrasiloxane (B1) , 30 parts of 2,2,2-trifluoroethyl methacrylate (C1) and 30 parts of 3,3,5-trimethylcyclohexyl methacrylate (D1) were mixed, to which was added 0.5 parts of benzoin methyl ether (photopolymerization initiator) to prepare a polymerizing monomer mixture. This was degassed, and cast onto a quartz glass sheet having a Teflon spacer put thereon, and covered with another quartz glass sheet. This was then exposed to a 150 W high-pressure mercury lamp for 10 minutes, and polymerized into a copolymer. The obtained copolymer was peeled from the quartz glass sheets, and this is an ocular lens material. Ultimate strain of the ocular lens material obtained herein was evaluated and measured according to the method mentioned hereinabove. The value of ultimate strain was 11.6 %.

6. The undersigned petitioner declares further that all statements made herein of his own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Date: December 9, 2003

By: Takumi Fujitani

Takumi Fujitani